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|-------------------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO.         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/067,638              | 04/28/1998  | LEX M. COWSERT       | ISIS-2960-CPA2      | 1414             |
| 56907                   | 7590        | 05/18/2007           | EXAMINER            |                  |
| ELMORE PATENT LAW GROUP |             |                      | MORAN, MARJORIE A   |                  |
| 209 MAIN STREET         |             |                      | ART UNIT            | PAPER NUMBER     |
| N. CHELMSFORD, MA 01863 |             |                      | 1631                |                  |
| MAIL DATE               |             | DELIVERY MODE        |                     |                  |
| 05/18/2007              |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/067,638             | COWSERT ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Marjorie Moran         | 1631                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 09 February 2007.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 83-87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 83-86 is/are allowed.
- 6) Claim(s) 87 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

Claims 83-87 are pending. All rejections and objections not reiterated below are hereby withdrawn in view of the amendment and arguments filed 2/9/07.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 87 is again rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a NEW MATTER rejection.

A step of searching a database for alternative transcripts for a selected nucleic acid, as recited in amended claim 87, is new matter. The original claims did not recite any limitations regarding searching databases nor alternative transcripts. In the response filed with the amendment of 2/9/07, applicant points to pages 14-16 for support for the new limitation.

Applicant's arguments filed 2/9/09 have been fully considered but they are not persuasive. In response to the argument that the totality of teachings in the specification provide support for searching a database for alternative transcripts, it is noted that none of the databases listed for search; e.g. in Table 1 on pages 16-17, are "transcript"

databases. In fact, Htgs is known to be a database of *genomic* sequences and Dbest is a database of EST's (i.e. incomplete sequences), therefore these would not be considered by one of skill in the art to be databases expected to provide alternative transcript sequences. In response to the argument that page 14 teaches that ANY nucleotide sequence ...may be used as target actually supported the examiner's position as "any" nucleotide sequence may include a variety of different "classes" of sequences, including partial sequences, non-gene sequences such as regulatory regions, introns, rRNAs, mtRNA, mtDNA, repetitive sequences, etc. In fact, page 14 continues on lines 20-27 to disclose that while one embodiment is directed to polypeptide encoding sequences, "other nucleic acids may be targeted as well" such as various RNAs. In response to the argument that page 15 teaches that sequence information may be deposited in a database, applicant is reminded that the limitation in question is not one of depositing information, but one of SEARCHING for SPECIFIC types of sequences. In response to the argument that page 15 discloses searching for related sequence information, it is noted that nowhere does the instant specification define or disclose that "related information" is necessarily, or even possibly, alternative transcripts. In fact, the specification discloses on page 16, in concert with Figure 3, that in the case where full-length cDNA information is not available, databases are searched for additional information, wherein that "additional information" may be *genomic* sequence information. From the genomic sequence, a putative transcript (via exon assembly) may be generated/predicted. However, generation and/or prediction of a putative cDNA (transcript), as disclosed on page 16 (a) is not the same as a simple

search for a transcript, and (b) is not the same as a search for an *alternative* transcript. For these reasons, the arguments are not persuasive and the rejection is maintained.

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: the prior art does not teach or fairly suggest a method as claimed, specifically one comprising steps of generating a list of oligonucleotide sequences of a desired length which yield a set of virtual oligonucleotides, which set is then used to generate a subset according to the recited criteria.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Claims 83-86 are allowed; claim 87 is again rejected.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie Moran whose telephone number is 571-272-0720. The examiner can normally be reached on M-F 6:30 am- 2 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marjorie Moran  
Primary Examiner  
Art Unit 1631

*Marjorie A. Moran*  
5/12/07